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| Traveler Title | H-HOM Feedthrough Brazing Assembly | | | |
| Traveler Abstract | Outlines the brazing assembly of of the H-HOM Feedthrough Assembly | | | |
| Traveler ID | AUP-ASSY-HHOMFT-HFTBRZ | | | |
| Traveler Revision | R1 | | | |
| Traveler Author | Matthew Weaks | | | |
| Traveler Date | 30-Jul-21 | | | |
| NCR Informative Emails | weaksmc | | | |
| NCR Dispositioners | huque,scott | | | |
| D3 Emails | huque,scott,weaksmc | | | |
| Approval Names | Matthew Weaks | Scott Williams | Naeem Huque |  |
| Approval Signatures |  |  |  |  |
| Approval Dates |  |  |  |  |
| Approval Title | Author | Reviewer | Project Manager |  |

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| References | List and Hyperlink all documents related to this traveler. This includes, but is not limited to: safety (THAs, SOPs, etc), drawings, procedures, and facility related documents. | | | |
| [CP-STP-CAV-CHEM-DEGR](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211743/CP-STP-CAV-CHEM-DEGR-R3.pdf) | [CP-STP-CAV-CHEM-ACID](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211742/CP-STP-CAV-CHEM-ACID-R1.pdf) | [CERN EDMS No. 1389669](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-211730/EDMS%201389669%20-%20Engineering_specification_dressed_cavities.v2.5(1).pdf) | [JL0092614](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212534/JL0092614_-_FLANGE%20BRAZING%20ASSY.pdf) | [JL0089755](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212529/JL0089755_-H-HOM%20FEEDTHROUGH%2025ohm%20ROD.pdf) |
| [LHCACFHC0206](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212536/LHCACFHC0206.pdf) | [JL0089751](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-212528/JL0089751_-_H-HOM%20FEEDTHROUGH%20BRAZING%20ASSY.pdf) |  |  |  |

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| Revision Note |  |
| R1 | Initial release of this Traveler. |

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| Step No. | Instructions | Data Input |
| CHEMISTRY PROCESS | | |
| 1 | Serial Number of Assembly  Serial Number of JL0092614  Serial Number of LHCACFHC0206  Serial Number of JL0089755 | [[HFTBRZ]] << HFTBRZSN>>  [[FLBRZ]] << FLBRZSN>>  [[DSCCRMSN]] <<DSCCRMSN>>  [[FTRODSN]] <<FTRODSN>> |
| Degrease/Etch JL0089755 as per JLab CP-STP-CAV-CHEM-ACID.  Upload any relevant photos and/or comments. | [[DG1Tech]] <<SRF>>  [[DG1Time]] <<TIMESTAMP>>  [[DG1Comm]] <<COMMENT>>  [[DG1File]] <<FILEUPLOAD>> |
| Degrease/Etch JL0092614 as per JLab CP-STP-CAV-CHEM-ACID  Upload any relevant photos and/or comments. | [[DG2Tech]] <<SRF>>  [[DG2Time]] <<TIMESTAMP>>  [[DG2Comm]] <<COMMENT>>  [[DG2File]] <<FILEUPLOAD>> |
| Degrease LCHACFHC0206 as per JLab Procedure CP-STP-CAV-CHEM-DEGR.  Upload any relevant photos and/or comments | [[DG3Tech]] <<SRF>>  [[DG3Time]] <<TIMESTAMP>>  [[DG3Comm]] <<COMMENT>>  [[DG3File]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| VISUAL INSPECTION | | |
| 2 | Inspect parts visually for any damage or other features that could hinder brazing.  Upload photos of any issues. | [[Vis1Tech]] <<SRF>>  [[Vis1Comm]] <<COMMENT>>  [[Vis1File]] <<FILEUPLOAD>> |
|  | Hold to review inspection reports, travelers, NCRs, BPS, and BPQR to verify parts are ready for brazing. | [[HoldPoint]] {{huque}} <<HOLDPOINT>> |
| BRAZING | | |
| 3 | Brazing according to CERN EDMS No. 1389669 – Section 4.2.6.1  Upload relevant BPS and BPQR.  Upload any relevant photos and/or comments | [[BrzTech]] <<SRF>>  [[BrzComm]] <<COMMENT>>  [[BrzFile]] <<FILEUPLOAD>> |
| Visually inspect braze as per EN 12799 and EN ISO 18279, as defined in CERN EDMS No. 1389669 – Section 4.2.7.  Upload inspection report. | [[Vis2Tech]] <<SRF>>  [[Vis2Comm]] <<COMMENT>>  [[Vis2File]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| THERMAL SHOCK | | |
| 4 | Thermal shock the assembly by immersing it into LN2 five times, while allowing the part to reach room temperature between immersions. | [[TS1Tech]] <<SRF>>  [[TS1Time]] <<TIMESTAMP>>  [[TS1Comm]] <<COMMENT>>  [[TS1File]] <<FILEUPLOAD>> |
| LEAK CHECK | | |
| 5 | Leak check the assembly in accordance with EN 13185 as defined in CERN EDMS No. 1389669 – Section 4.5.  Upload leak check chart. | [[LCTech]] <<SRF>>  [[LCTime]] <<TIMESTAMP>>  [[LCComm]] <<COMMENT>>  [[LCFile]] <<FILEUPLOAD>> |
| ULTRASONIC INSPECTION | | |
| 6 | Inspect the assembly ultrasonically as per EN 12799, as defined in CERN EDMS No. 1389669 – Section 4.2.6.4.  Upload inspection report. | [[US1Tech]] <<SRF>>  [[US1Comm]] <<COMMENT>>  [[US1File]] <<FILEUPLOAD>> |
| MACHINING | | |
| 7 | Machine the assembly as per drawing JL0089751  Upload any relevant photos, documents, or comments. | [[MachTech]] <<SRF>>  [[MachTime]] <<TIMESTAMP>>  [[MachComm]] <<COMMENT>>  [[MachFile]] <<FILEUPLOAD>> |